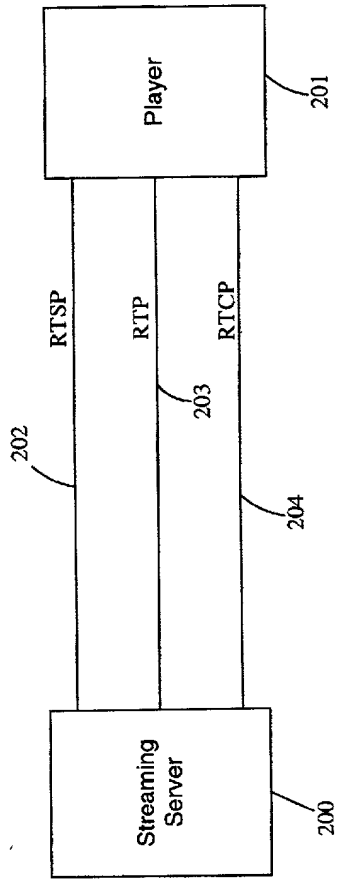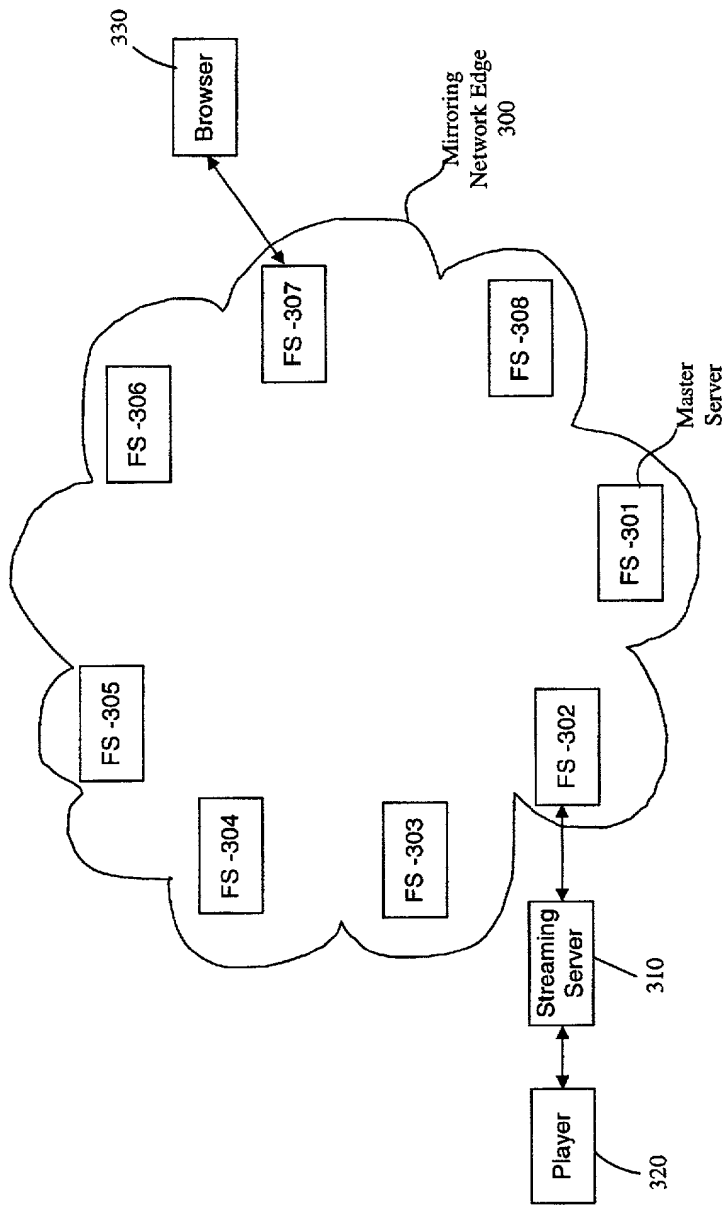Figure 1

Figure 2

Figure 3
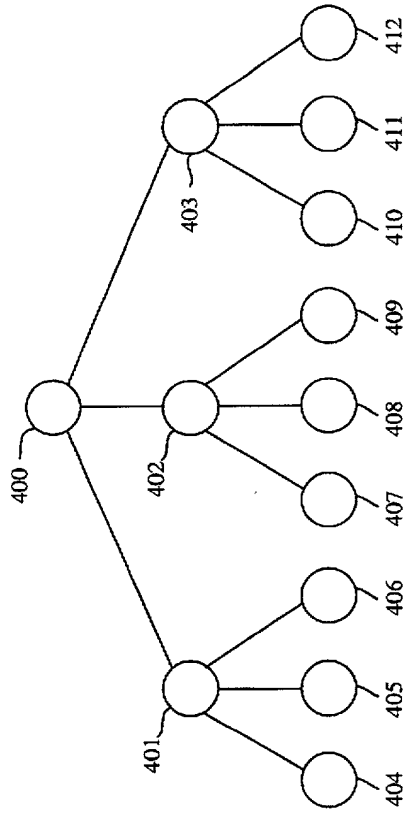
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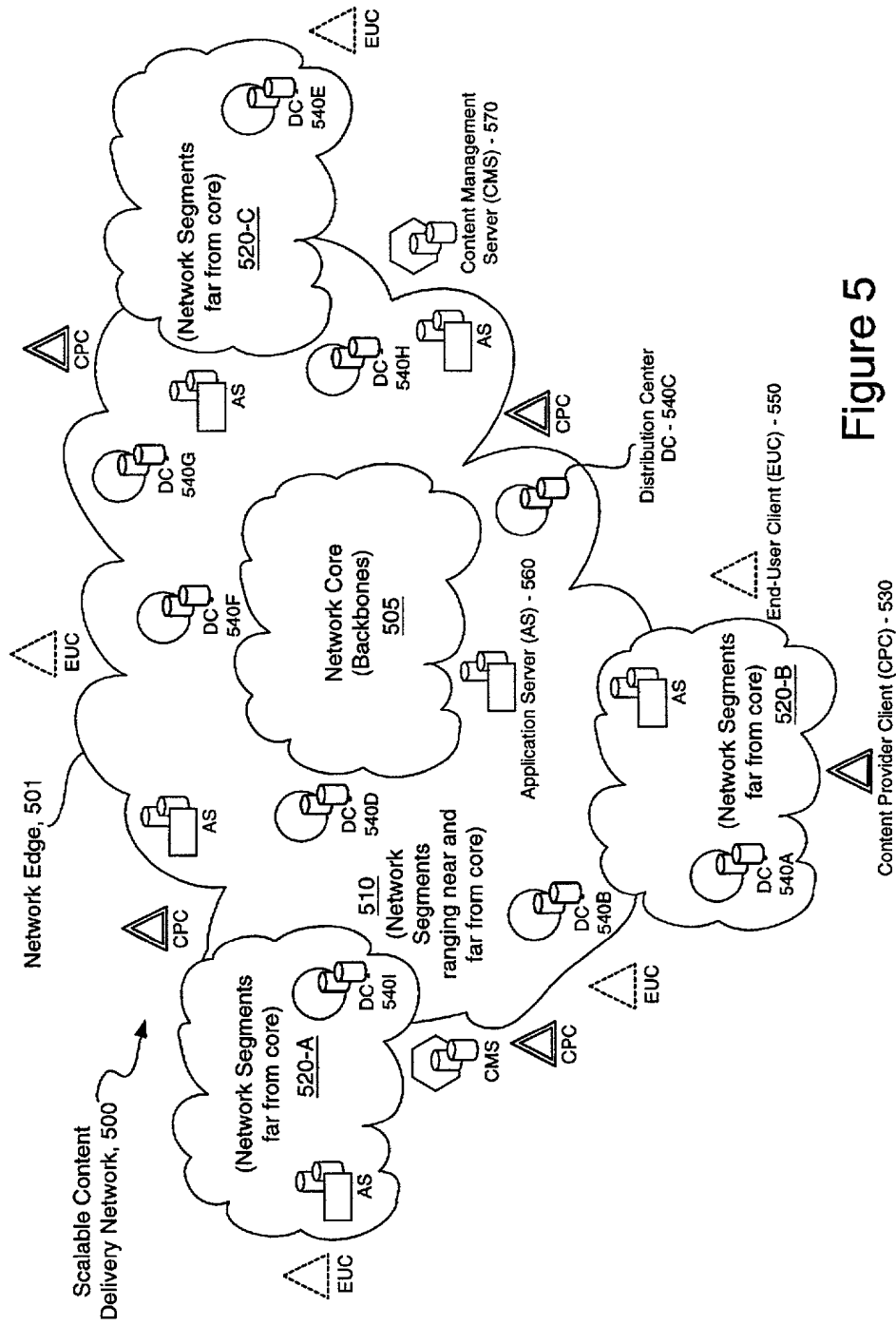
Figure 5

Scalable Content Delivery Network, 500

Network Edge, 501

EUC

CPC

AS

DC 540D

DC 540F

AS

CPC

EUC

DC 540G

AS

DC 540H

DC 540E

EUC

520-C
(Network Segments far from core)

Network Core (Backbones)
505

Content Management Server (CMS) - 570

Distribution Center DC - 540C

CPC

Application Server (AS) - 560

End-User Client (EUC) - 550

Content Provider Client (CPC) - 530

520-A
(Network Segments far from core)

AS

DC 540I

CMS

CPC

EUC

510
(Network Segments ranging near and far from core)
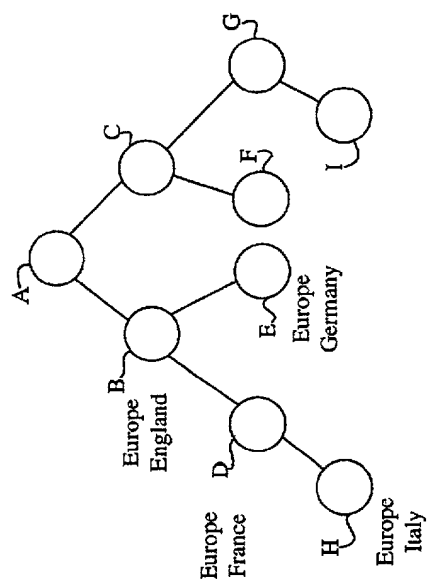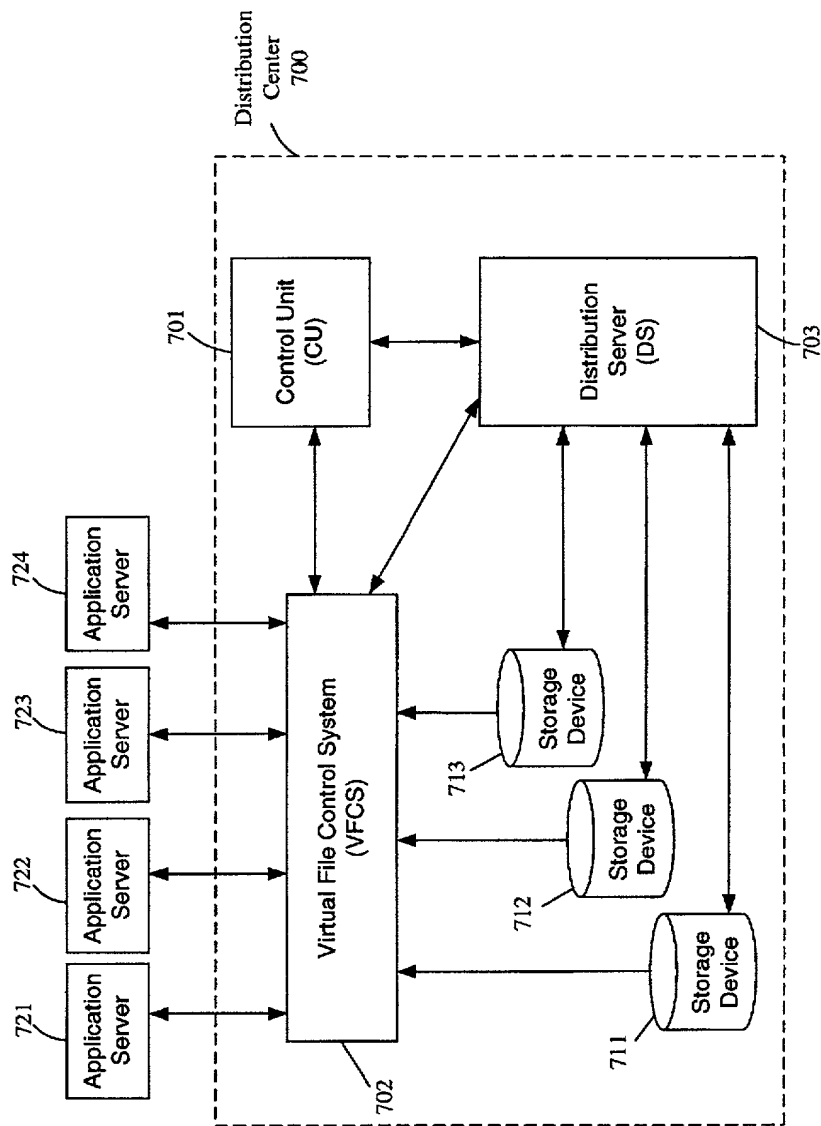
DC 540B

EUC

520-B
(Network Segments far from core)

AS

DC 540A

EUC

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

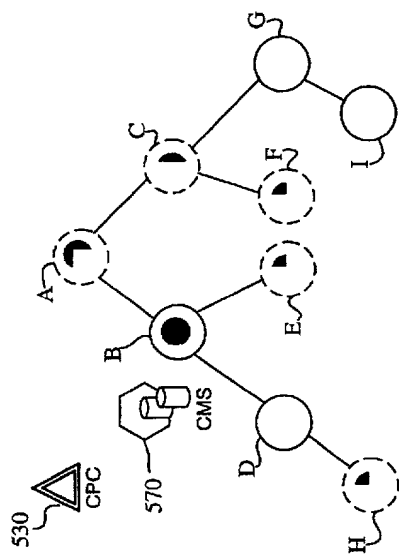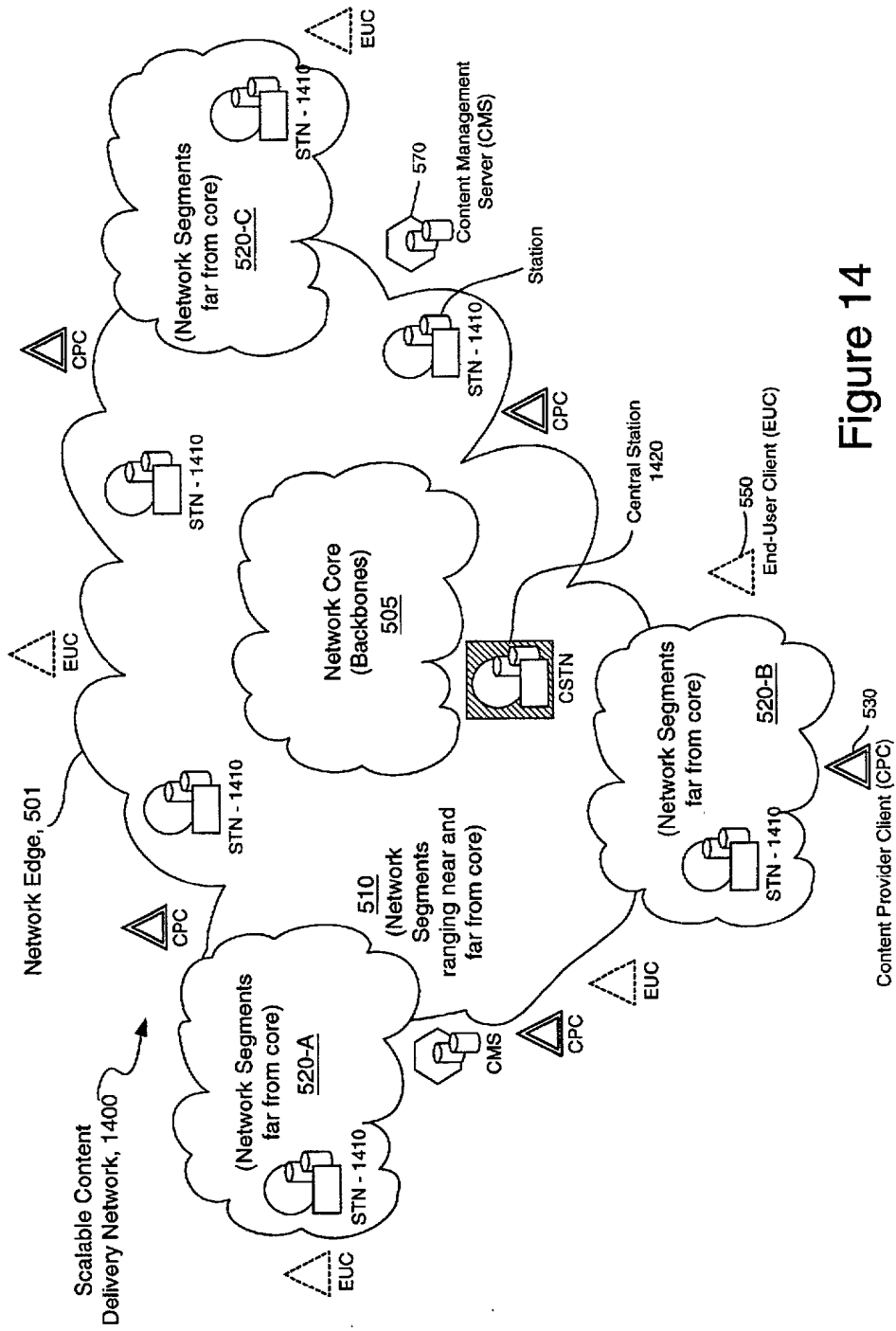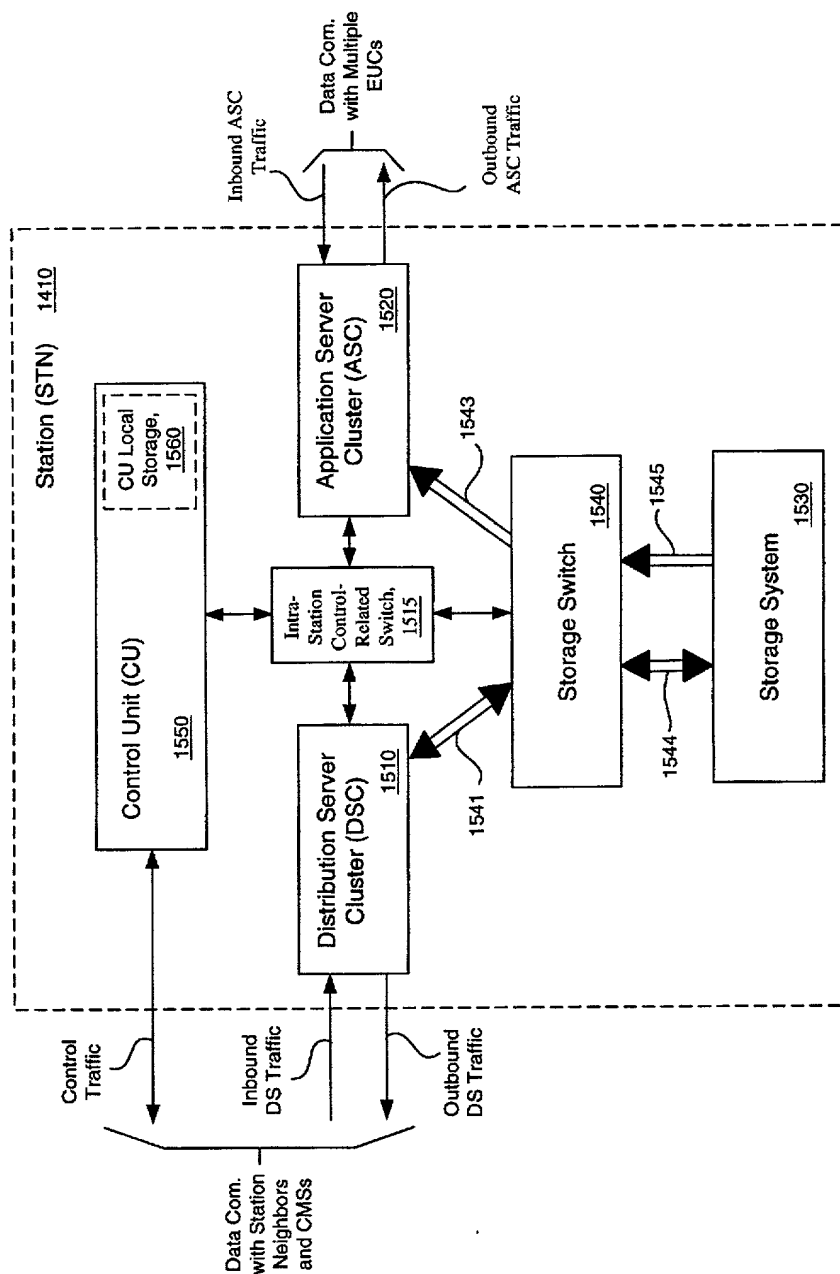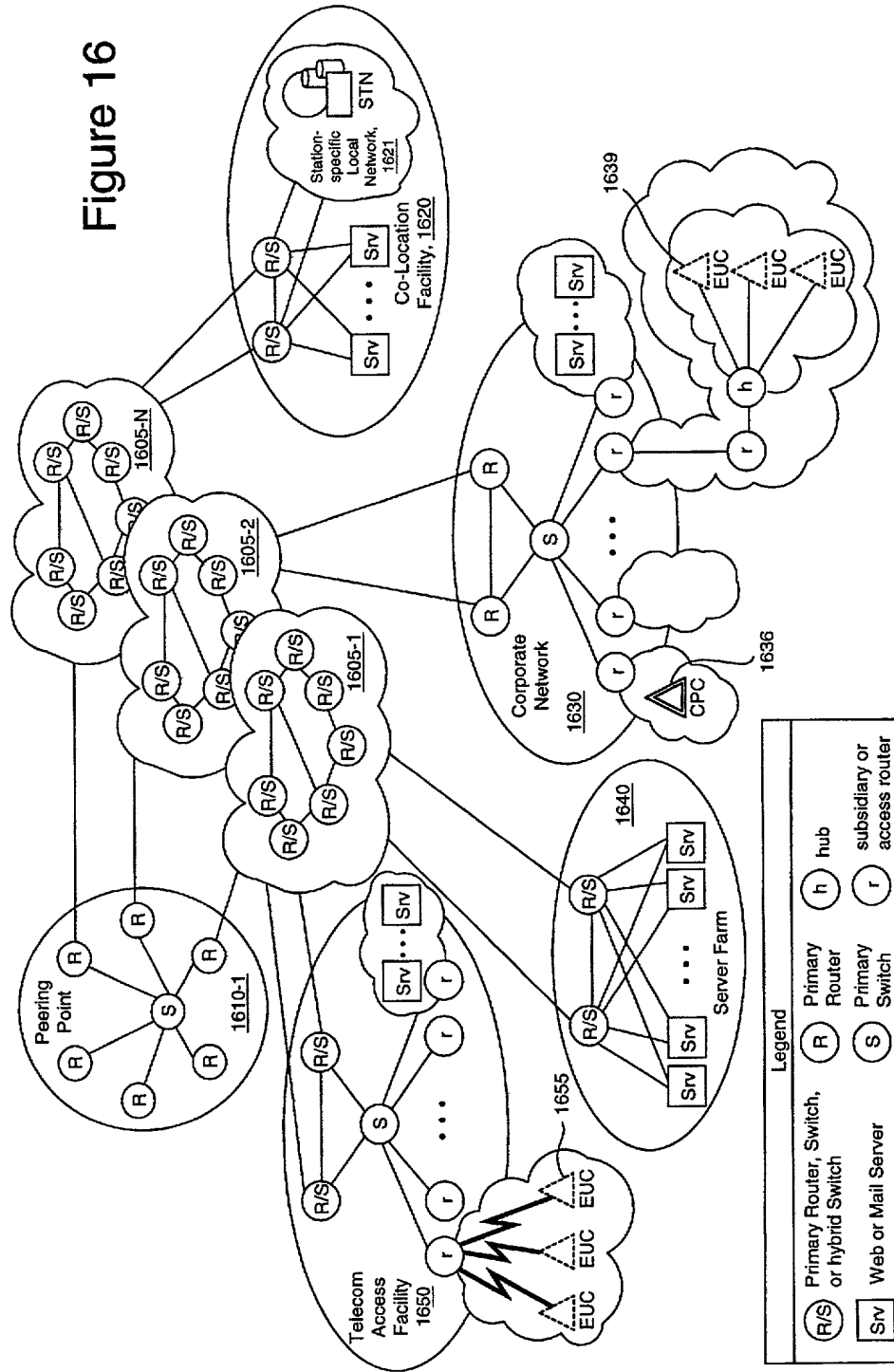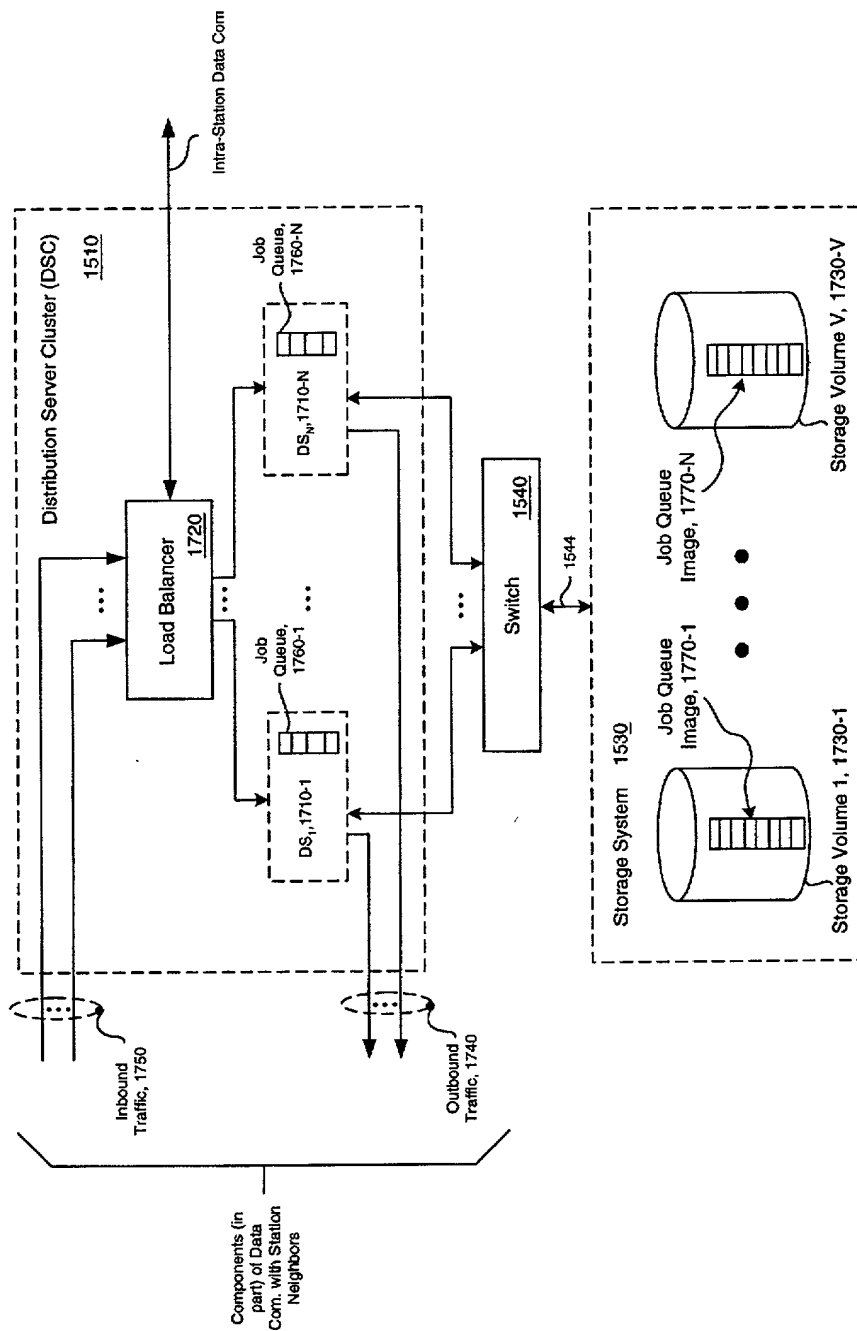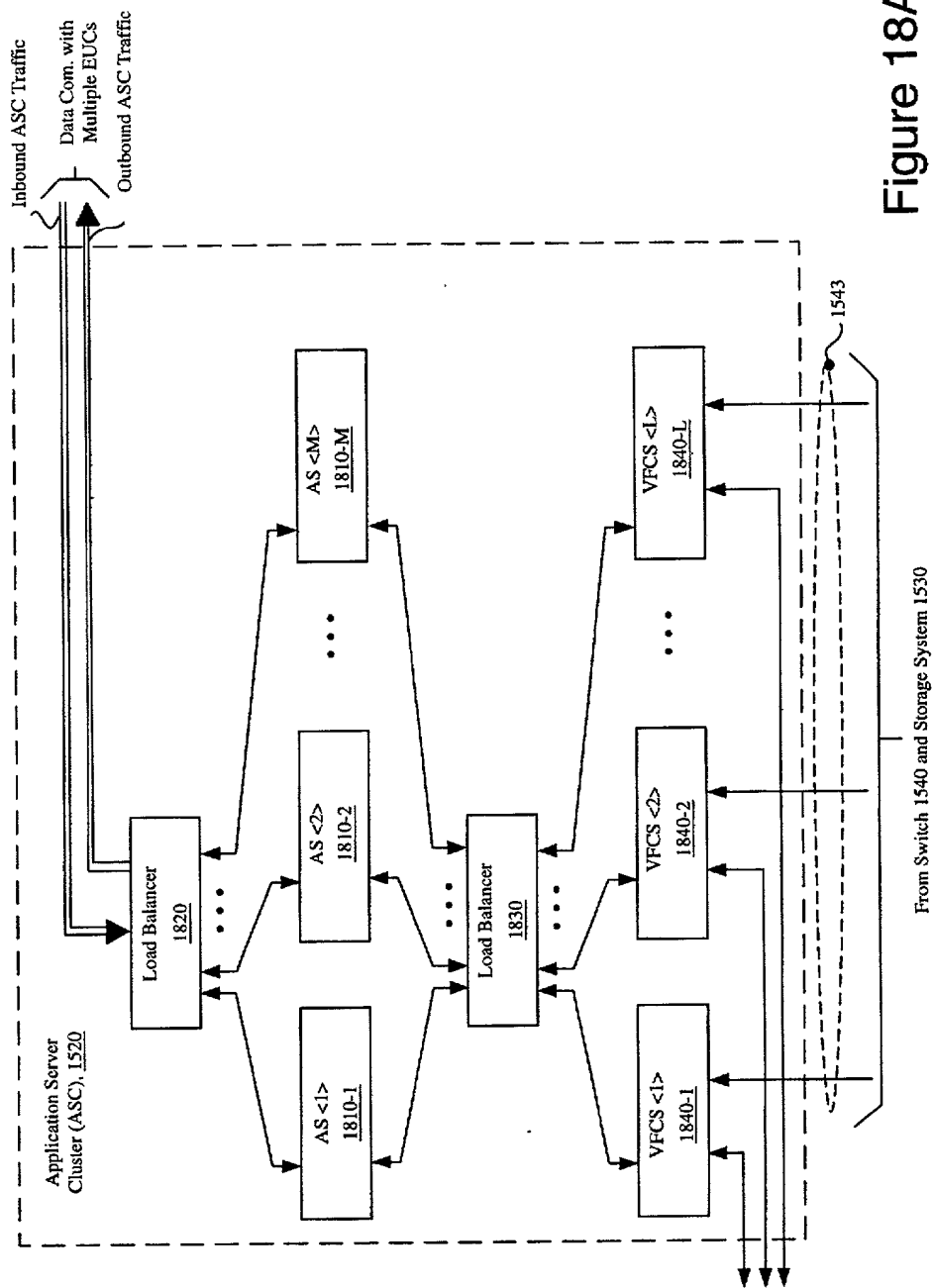| Bit Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Attribute B	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1200
Attribute D	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1210
Attribute E	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1220
Attribute H	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1230
Rolled Up Attribute D	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1240
Rolled Up Attribute B	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1250

Figure 12

Figure 13

Figure 14

Figure 15

Figure 16

Figure 17

Figure 18A

Application Server Cluster (ASC), 1520

Inbound ASC Traffic

Data Com. with Multiple EUCs

Outbound ASC Traffic

Load Balancer 1820

AS <1> 1810-1

AS <2> 1810-2

AS <M> 1810-M

Load Balancer 1830

VFCS <1> 1840-1

VFCS <2> 1840-2
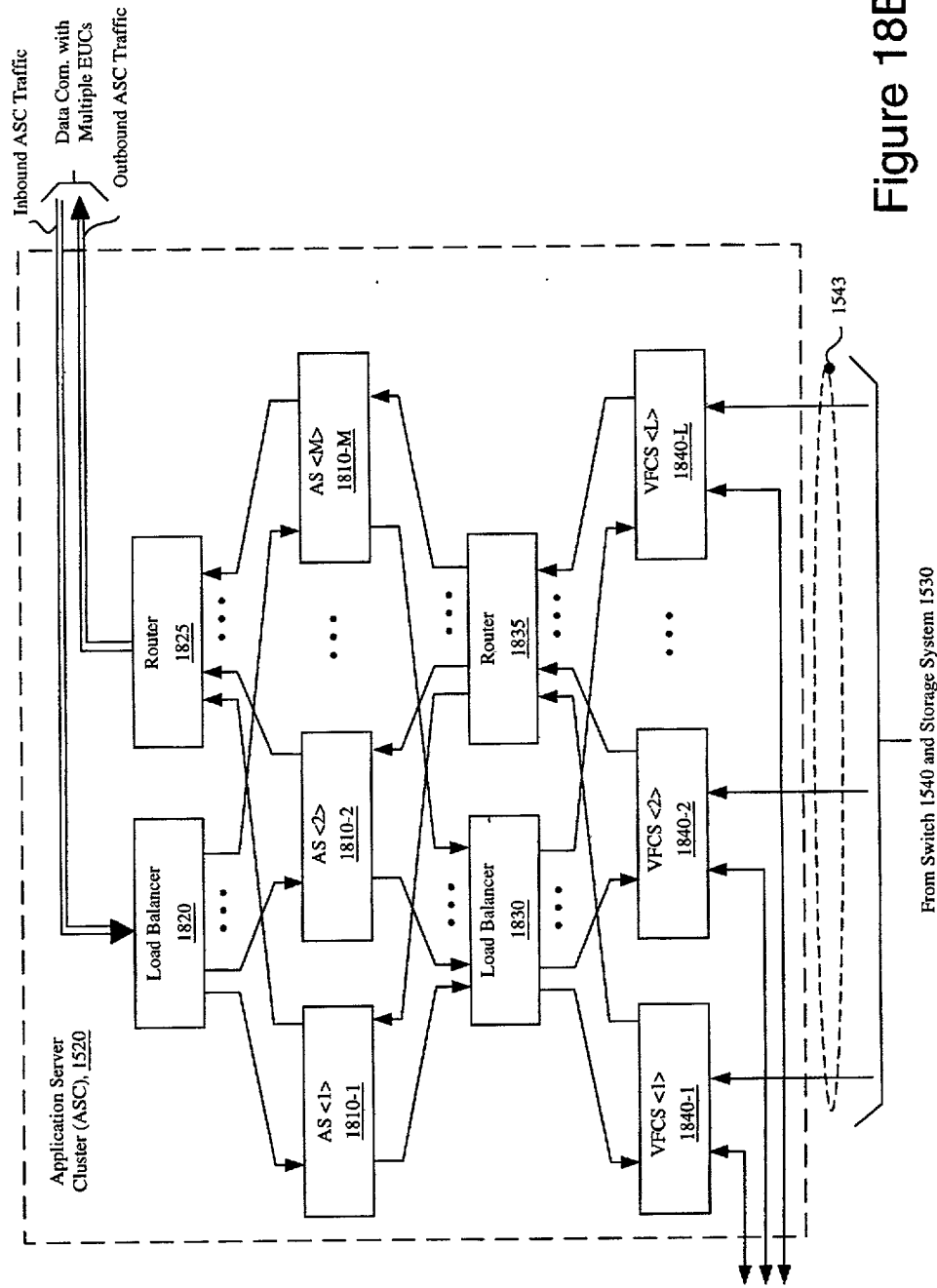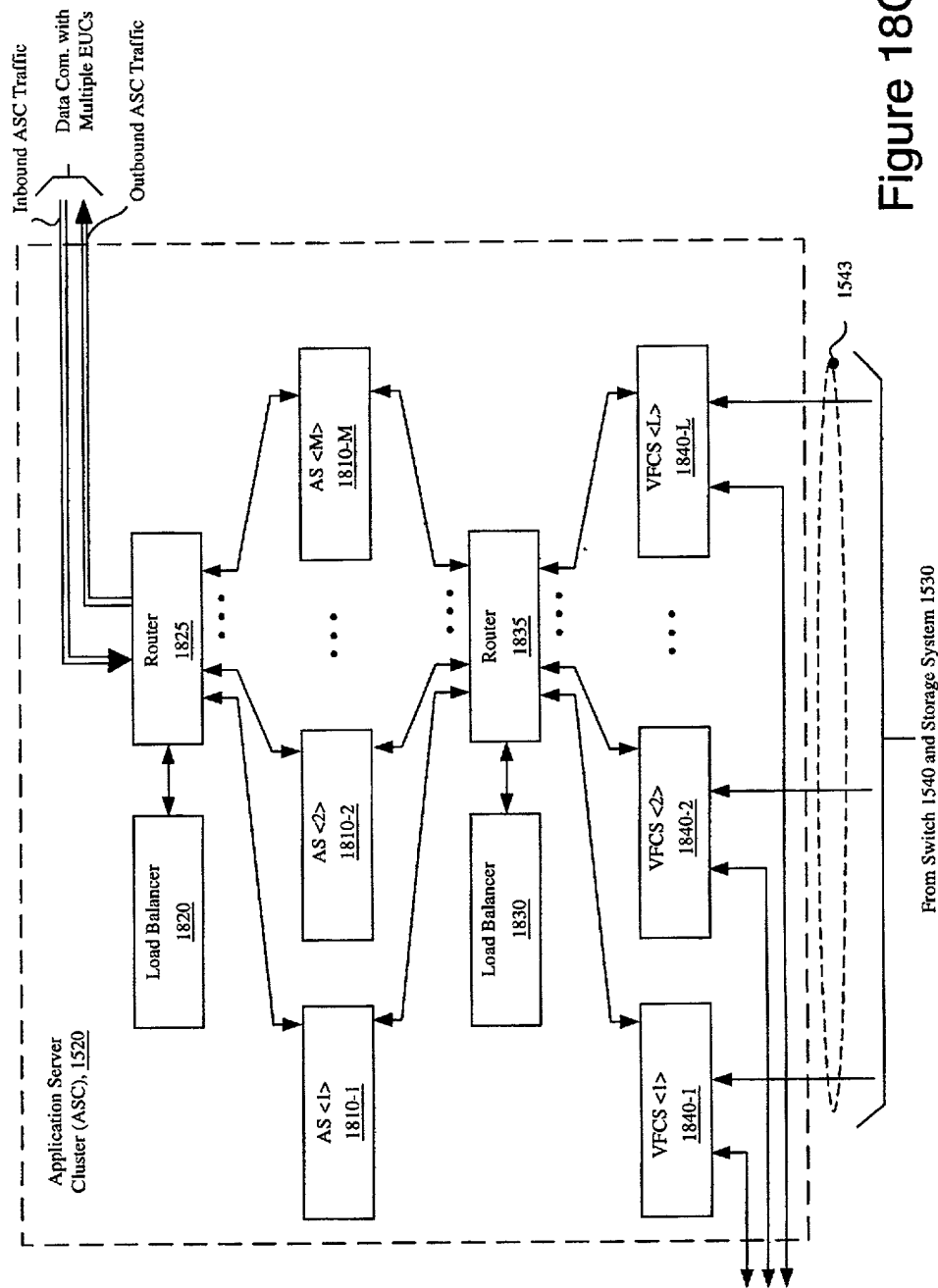
VFCS <L> 1840-L

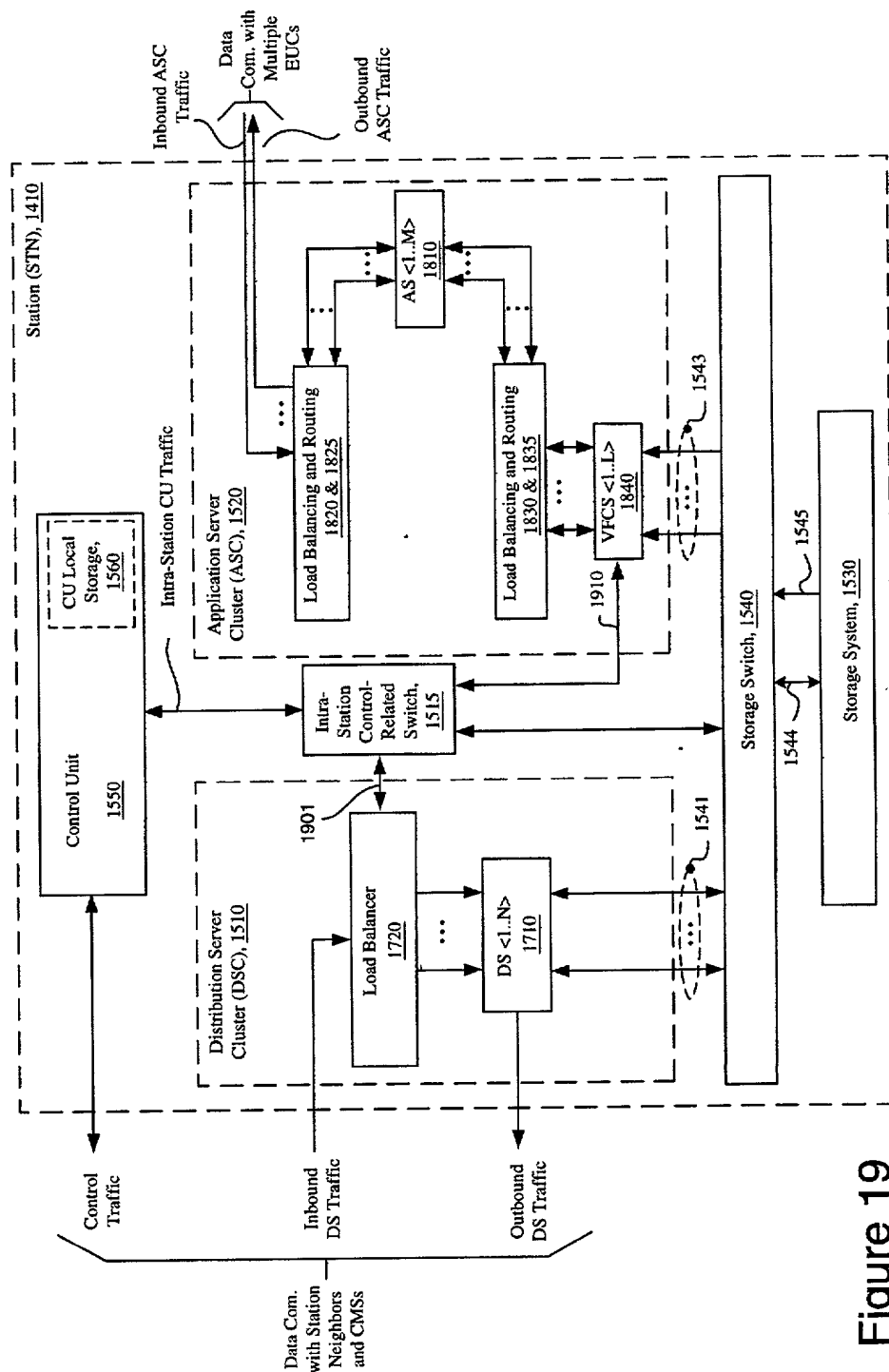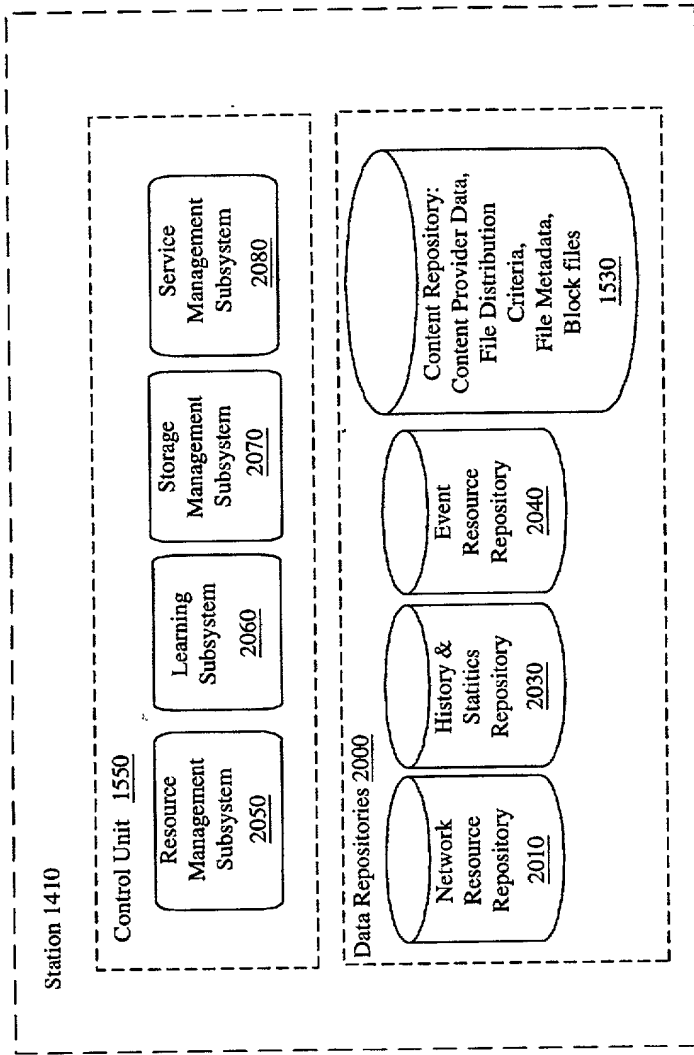From Switch 1540 and Storage System 1530
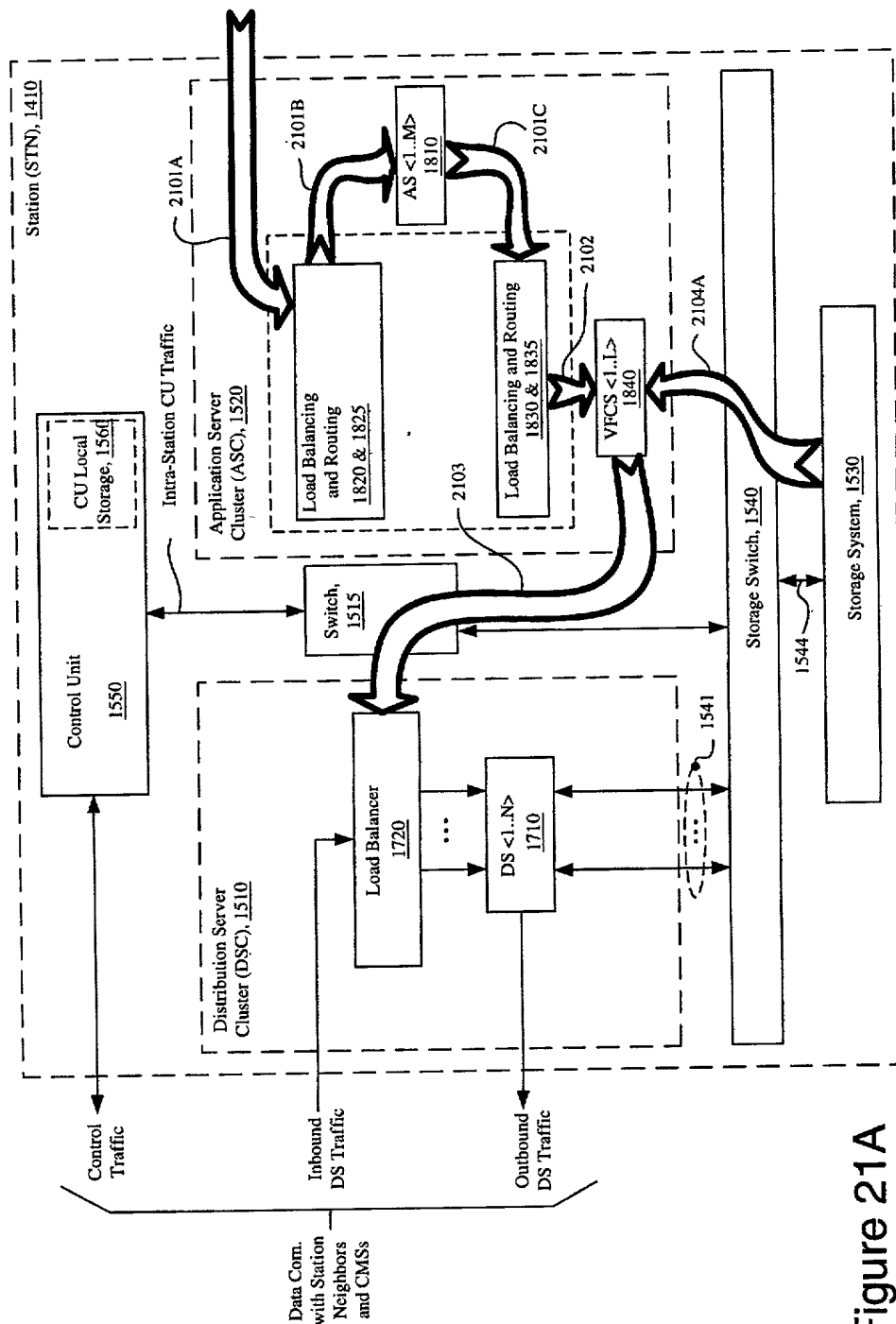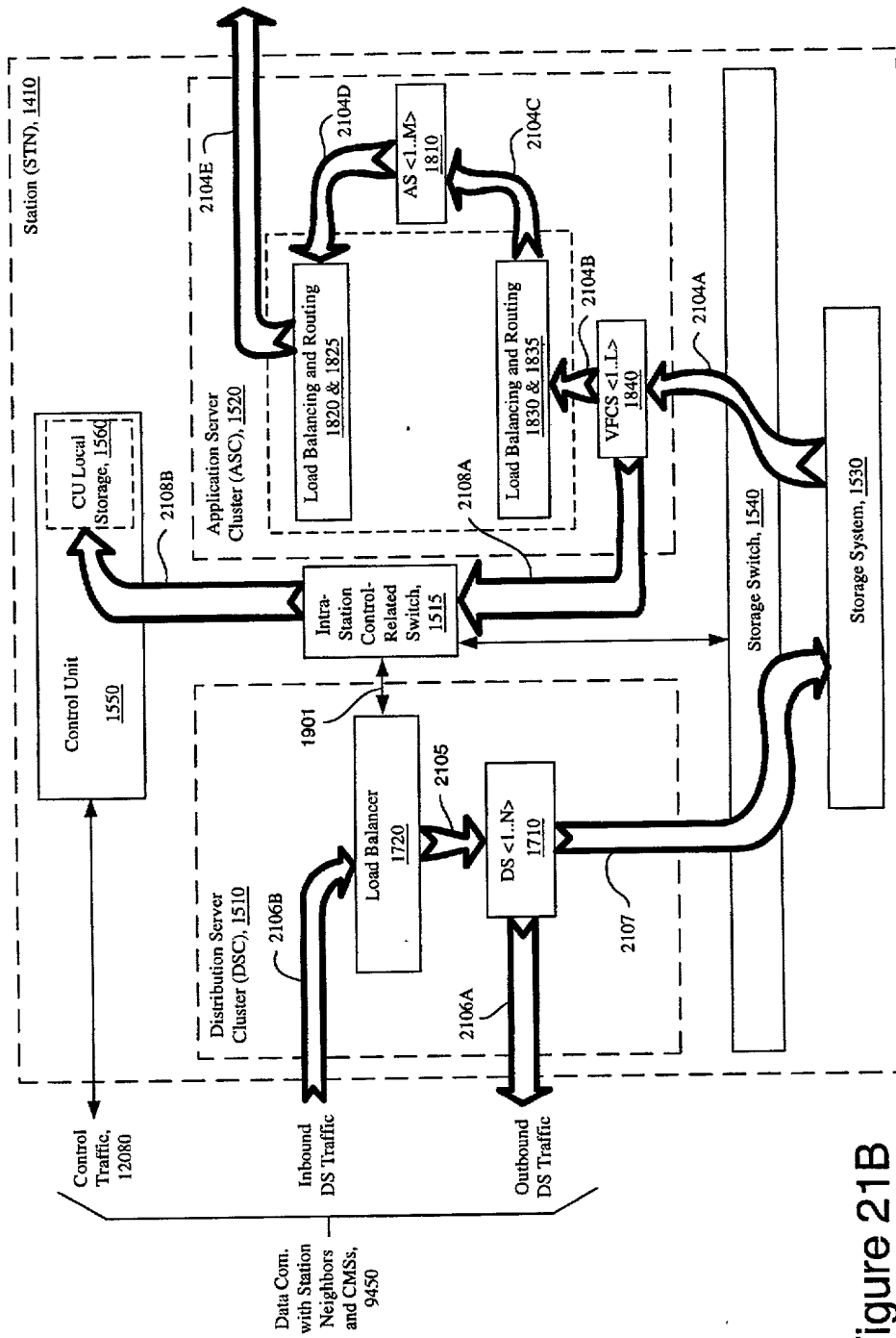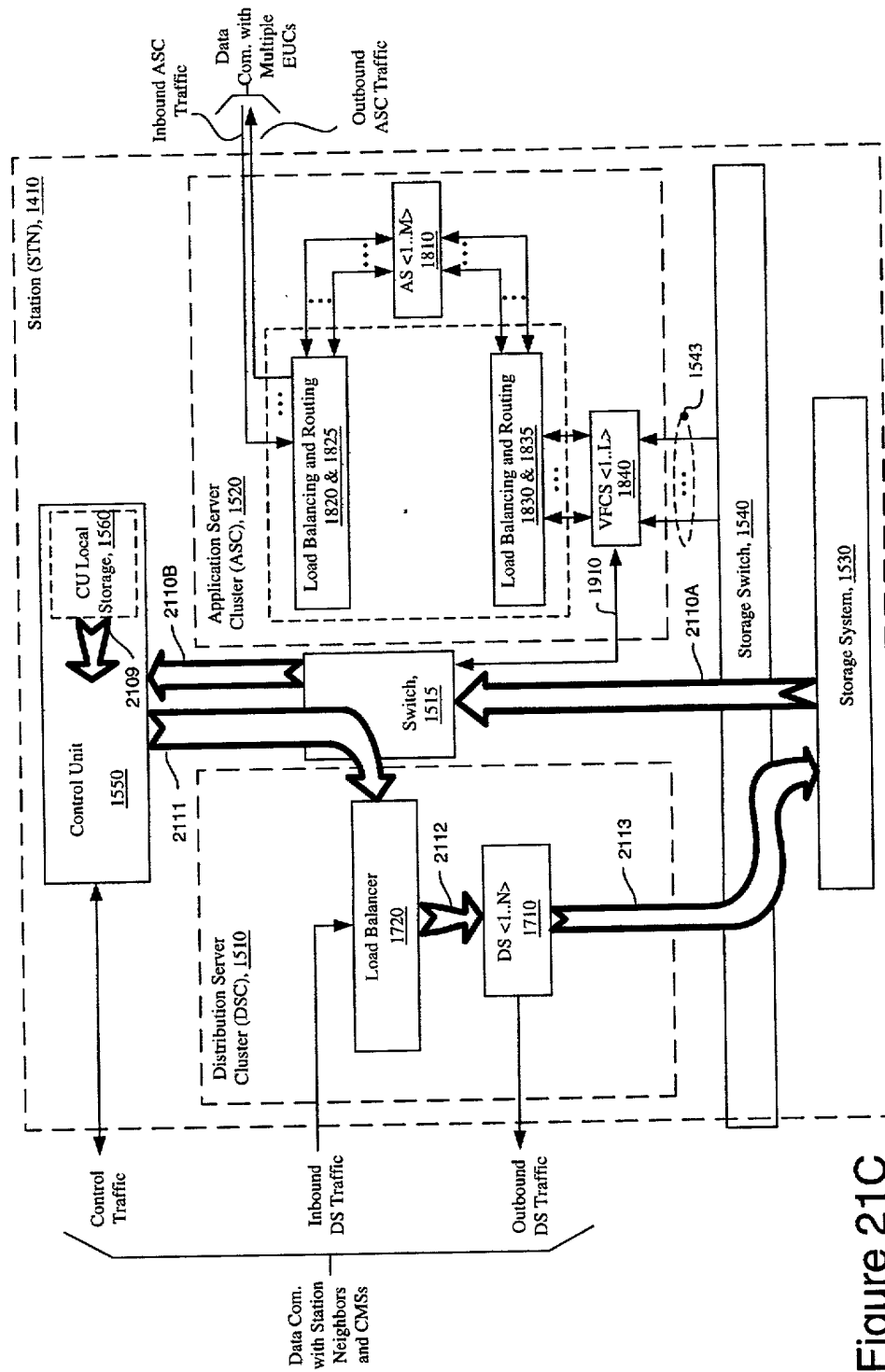
1543

Figure 18B

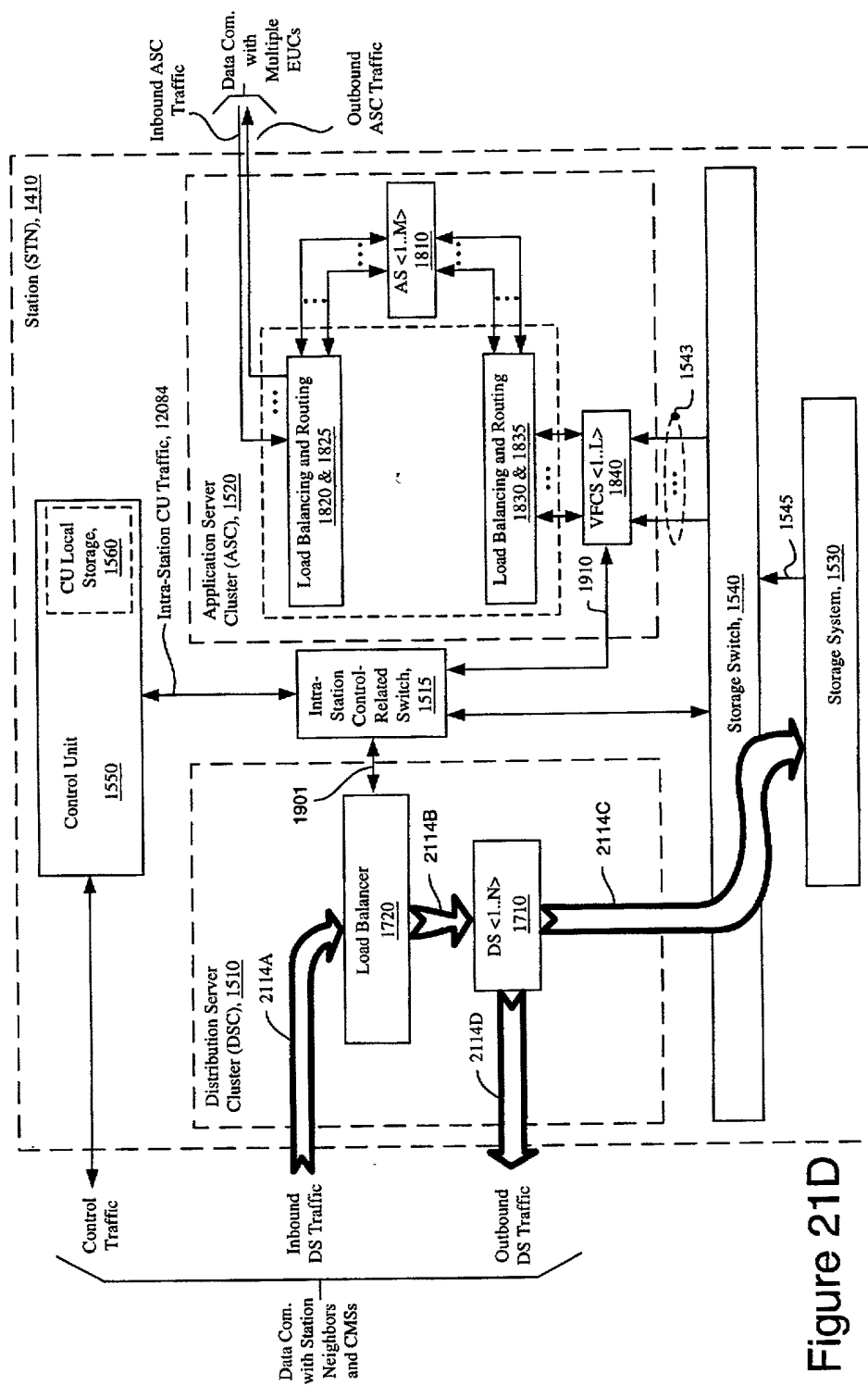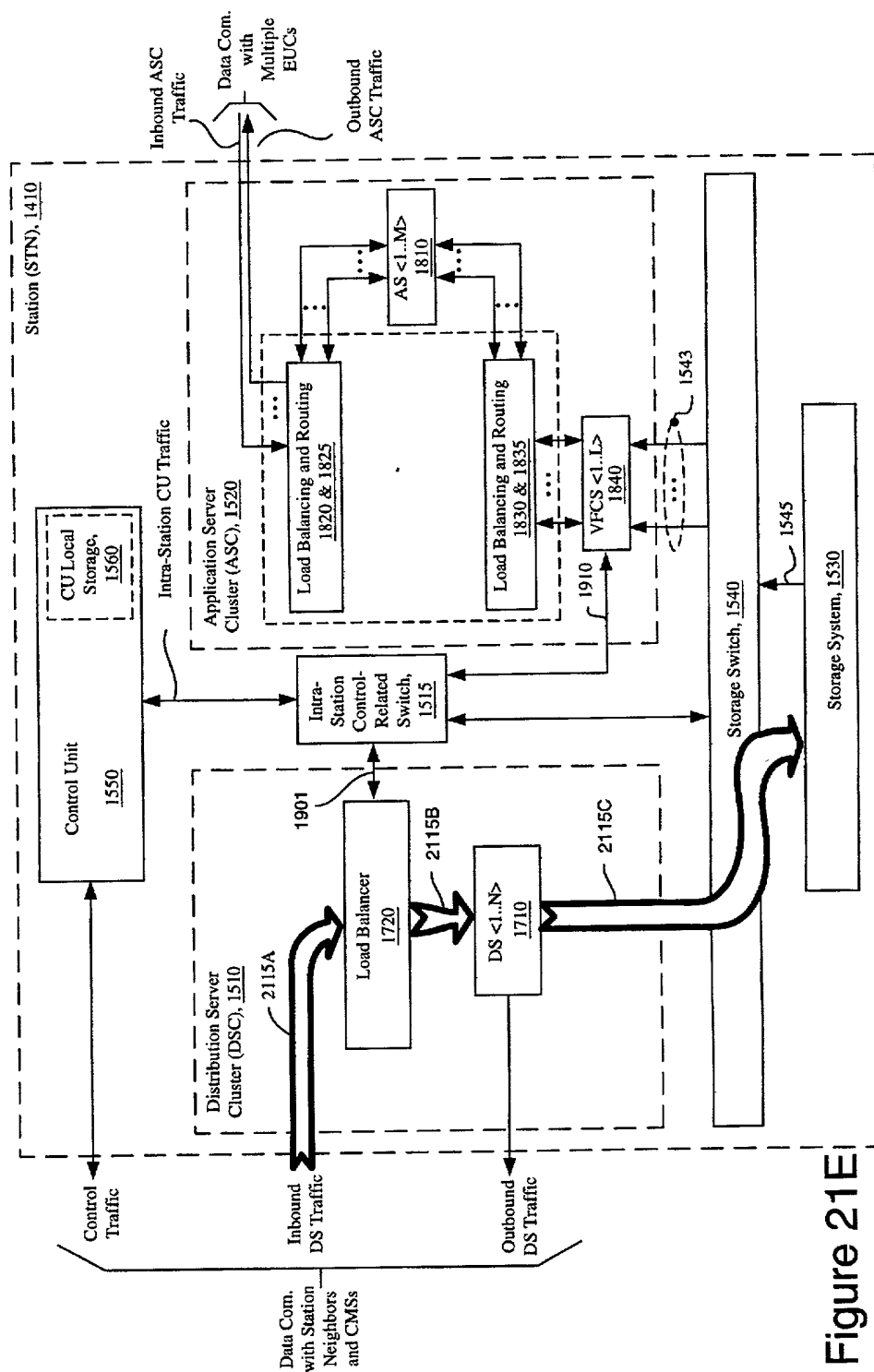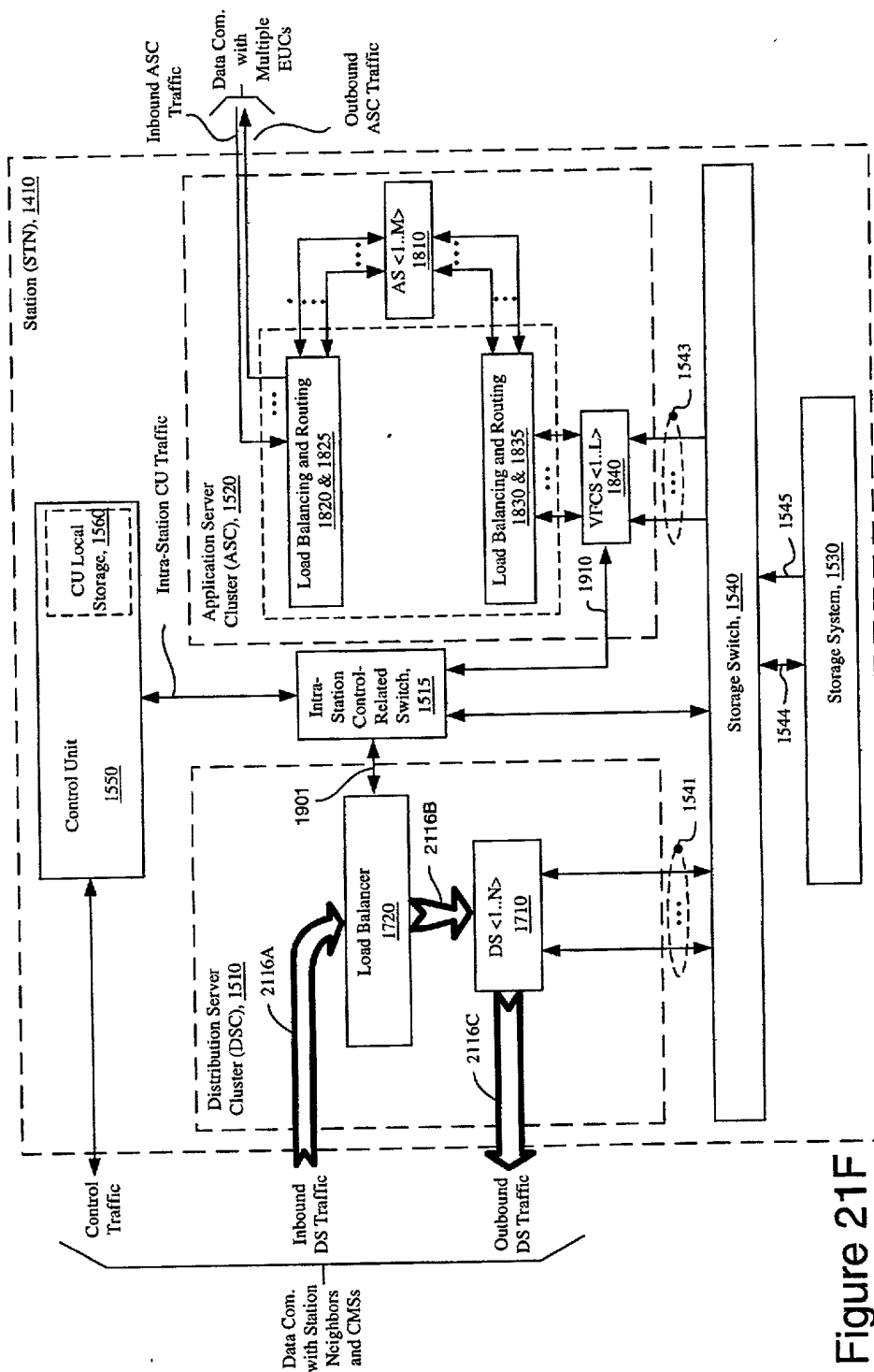Figure 18C

Figure 19

Figure 20

Figure 21A

Figure 21B

Figure 21C

Figure 21D

Figure 21E

Figure 21F

Figure 21G

Mount the Metadata Database and the Content Provider Data Table 2201

Mount the Volumes that contain the File Blocks 2202

Initialize the Content Provider Name Cache 2203

Initialize the File System and Assign a File Handle to the Root Export Directory 2204

Initialize the File System for the Content Provider Directories 2205
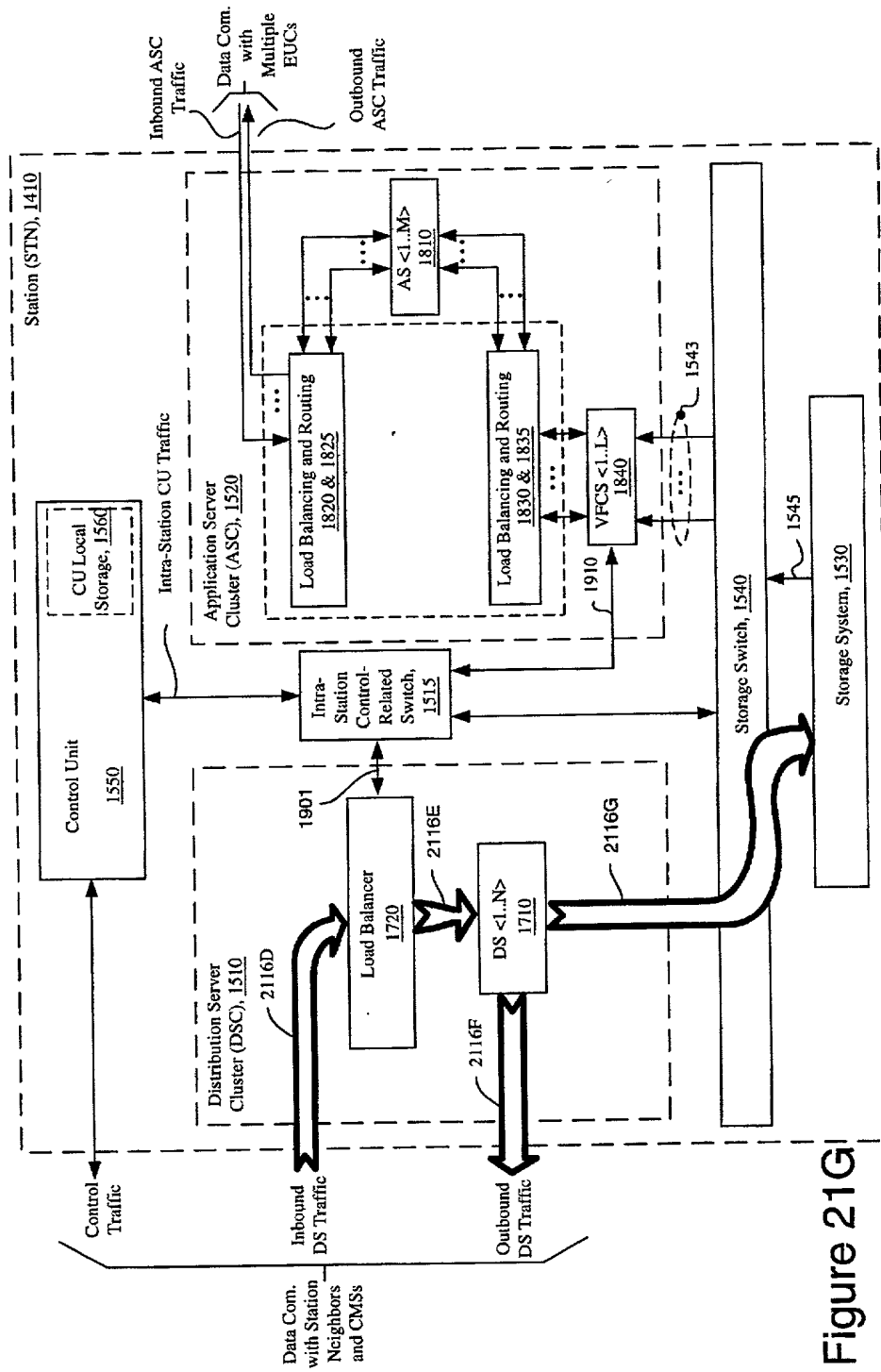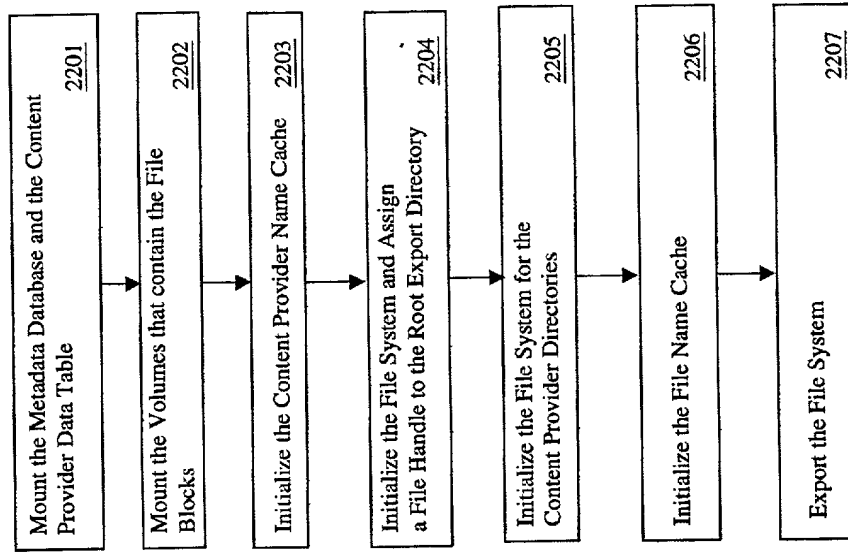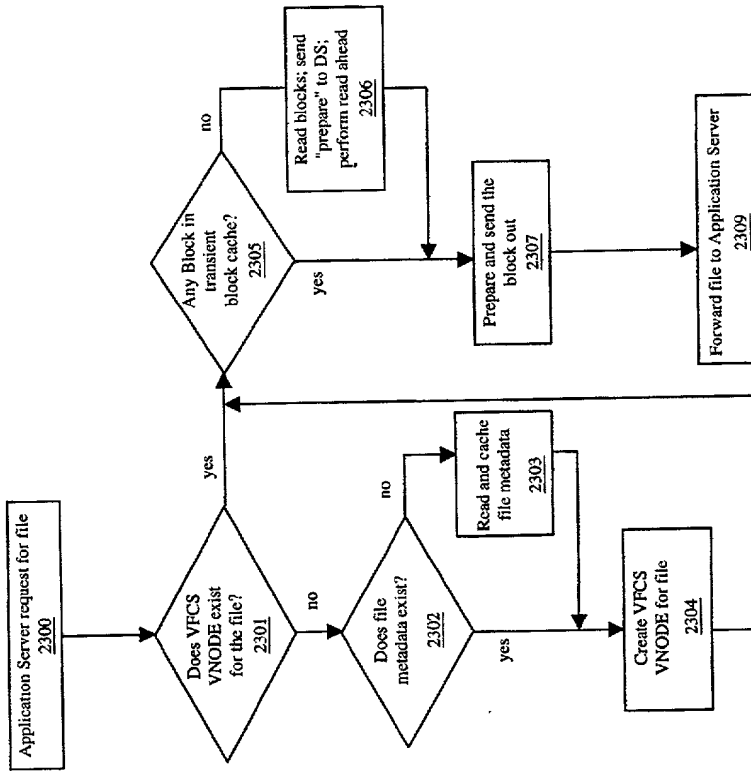
Initialize the File Name Cache 2206

Export the File System 2207

Figure 22

Figure 23

Figure 24

Figure 25